

Remarks

1. Status of the Application

Claims 20-47 and 67-80 are currently pending. Claims 33-47, 67, 68 and 72-80 are currently withdrawn from consideration. Claims 20-32 and 69-71 were rejected under 35 U.S.C. §103 in the Office action, but as a result of an examiner's interview on March 4, 2004, Examiner Ly has agreed to withdraw these rejections (see below).

Claims 33-47 and 72-80 are canceled by this amendment.

Applicants thank Examiner Ly for rescinding the withdrawal of claims 21 and 31.

2. Summary of Examiner's Interview on March 4, 2004

On March 4, 2004, attorneys for the applicants conducted a telephone interview with Examiners Ly and Marschel regarding the rejections of claims 20-32 and 69-71 under 35 U.S.C. §103 in view of a combination of the Goodacre and Sockalingum references (Goodacre and Kell, *Anal. Chem.*, **68**: 271-280, 1996; Sockalingum et al., *Cellular and Molecular Biology*, **44**: 261-269, 1998). In particular, attorneys for the applicants discussed the differences between the method of independent claim 20 and the methods taught by the Goodacre and Sockalingum references. As a result of this discussion, Examiner Ly agreed to withdraw the rejections of claims 20-32 and 69-71 under 35 U.S.C. §103, while reserving the right to perform a search for additional relevant references.

3. *Support for Amendments to the Claims*

Claims 21-32 and 67-71 have been amended solely to change grammar or punctuation. These are superficial changes that do not affect claim scope, and have not been made for reasons related to patentability.

4. *Withdrawn claims 67 and 68*

Claims 67 and 68 were previously withdrawn from consideration as allegedly being directed to non-elected subject matter. However, these claims are directed to particular species of environmental factors that affect the metabolic state of microorganisms. As explained at page 6, lines 23-26, environmental factors “include the identity and/or concentration of the chemical (organic and inorganic) constituents (such as sugars, salts, amino acids, antibiotics, buffers, pH) which comprise the substrate (e.g. a microbial growth medium) supporting growth of an organism.” Like other environmental factors such as temperature, pressure, exposure to light and exposure to gases, differences in growth media affect the metabolic state of microorganisms and lead to environmental drift in fingerprint spectra. In view of the apparent allowability of claim 20, which is directed to a method for correcting for drift in fingerprint spectra due to changes in environmental factors, applicants respectfully request that the withdrawal of claims 67 and 68 be rescinded, and these claims allowed.

5. *Rejections under 35 U.S.C. §103*

Claims 20-32 and 69-71 were rejected for allegedly being obvious in view of the Goodacre and Sockalingum references. Applicants traverse these rejections and ask that they be withdrawn as agreed to by Examiner Ly in the examiner’s interview of March 4, 2004.

There are two types of drift that can occur in fingerprint spectra: instrumental drift and environmental drift. Instrumental drift is drift that is caused by electronic drift and contamination effects that degrade instrument performance over time. Environmental drift is drift caused by a change in the conditions affecting the sample, not the instrument.

The pending claims are directed to a method for correcting for environmental drift. In contrast, the Goodacre reference is directed solely to a method for correcting for instrumental drift in fingerprint spectra (see abstract). The Sockalingum reference does not teach any method for correcting for drift, instrumental or environmental.

Claims 20-32 and 69-71, and currently withdrawn claims 67 and 68 are directed to a method for correcting for environmental drift by using the changes in the fingerprint spectrum of one microorganism upon going from one environment to another to correct the spectrum of another microorganism for drift that occurs between the two environments. The Goodacre and Sockalingum references do not teach or suggest using changes in the spectra of one microorganism to correct for changes in the spectra of another microorganism.


Independent claim 20 should be allowed because it is not *prima facie* obvious in view of the Goodacre and Sockalingum references for at least the reason that the combination of Goodacre and Sockalingum does not teach all of the elements of claim 20. For example, claim 20 recites the feature of first and second microorganisms where the second microorganism is presumably metabolically similar to the first microorganism. Neither Goodacre or Sockalingum teach or suggest first and second microorganisms where the two microorganisms are presumably metabolically similar. Claim 20 also recites the features of deriving a relationship between the fingerprint spectrum of the second microorganism under first and second sets of environmental factors, and applying the relationship derived for the second microorganism to transform the fingerprint spectrum of the first microorganism under the first set of environmental factors into an expected fingerprint spectrum for the first microorganism under the second set of environmental factors. Neither Goodacre nor Sockalingum teach or suggest deriving a relationship between the spectra of one microorganism between two environments and using the relationship to transform the fingerprint spectrum of another microorganism in a first environment into an expected fingerprint spectrum for the microorganism in a second environment. Since the combination of Goodacre and Sockalingum does not teach or suggest all of the features of claim 20, the rejection of claim 20 under 35 U.S.C. §103 should be withdrawn

as acknowledged by Examiner Ly. Moreover, since claims 21-32 and 67-71 all depend from claim 20, they also are not obvious in view of Goodacre and Sockalingum.

Applicants submit that claims 20-32 and 67-71 are in condition for allowance. If any issues remain before a Notice of Allowance is issued, please feel free to call the undersigned patent attorney at the Portland, OR, phone number provided below.

Respectfully submitted,

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